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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/074,064	02/12/2002	Antonio Asaro	00100.00.0130	6702

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VEDDER PRICE KAUFMAN & KAMMHOLZ
222 N. LASALLE STREET
CHICAGO, IL 60601

EXAMINER

MYERS, PAUL R

ART UNIT	PAPER NUMBER
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2112

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

10/074,064

Applicant(s)

ASARO ET AL.

Examiner

Paul R. Myers

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☒ Claim(s) 29-31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 9/27/04 have been fully considered but they are not persuasive.

In regards to applicants argument that Caruk et al's ROM is not for storing at least initial values and mask values for each ASIC. Caruk et al teaches multiple means of accessing configuration data (Column 16 lines 22-32) including a ROM. Caruk also teaches the configuration data being in the Bridge (figure 23). Thus Caruk et al teaches a ROM in the bridge storing configuration information. The examiner agrees that Caruk et al does not expressly state that initial values and mask values are included in the configuration information. Surugucchi et al and Venkat teach that initial values and mask values are part of configuration information.

In regards to applicants argument that Surugucchi does not teach the mask values being stored in the bridge. Caruk teaches storing configuration information in the bridge.

In regards to applicants argument that Venkat teaches storing the initial base address in the configuration space of the device and does not teach storing the initial base address in the Bridge. Caruk teaches the configuration information of the devices being stored in the bridge thus the combination teaches storing initial base address in the configuration space of the device which is in the bridge.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

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In regards to applicants argument that Caruk is silent as to the initialization of base address registers: Caruk teaches an initialization request (Abstract) and setting the base address registers for the graphics processors (See figures 3,4 and Column 6 lines 3-16).

In regards to applicants arguments regarding Caruk not teaching mask values and initial base values: Surugucchi et al teaches mask values and Venkat teaches initial base values.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 4-11, 13-20, 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caruk et al PN 6,662,257 in view of Surugucchi et al PN 6,094,699 and Venkat PN 5,857,083.

In regards to claims 1, 8, 10-11, 19, 28: Caruk et al teaches a data bridge system, comprising: an interface (interface to system AGP bus) for transferring data; a plurality of application-specific integrated circuits (ASICs) (120 and 130); a data bridge operatively coupled to each of the interface and the plurality of ASICs (110). Caruk et al also teaches the bridge accessing a ROM storing configuration (Column 16 lines 22-32). Caruk et al does not teach and the data bridge read only memory storing at least initial values and mask values for each ASIC of the plurality of ASICS. The examiner notes Caruk et al does teach the bridge having a plurality of Base address registers in accordance with the AGP and PCI specifications. Surugucchi et al

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teaches a bridge (210 or alternatively 210 and 212 taken together) including a mask register storing mask values for masking Base address registers in accordance with the attached peripherals. It would have been obvious to store the configuration mask values in the data bridge ROM of Caruk et al because this would have consolidated configuration. Venkat teaches storing the initial base addresses in the configuration space of the devices. It would have been obvious to store the initial values in the configuration space of the Caruk et al in view of Suruguchi et al because this would have consolidated necessary configuration data.

In regards to claims 2, 14, 18, 20, 24: Caruk et al teaches the ASICs being graphics processors.

In regards to claims 4, 22: Caruk et al teaches the bridge having Base address registers.

In regards to claims 5-6, 13, 16, 23, 26: Caruk et al teaches multiple base address registers in accordance with the AGP specification incorporated by reference in Caruk et al. The AGP specification in turn refers to the PCI specification which notes the number of Base address registers in a bus bridge is 6.

In regards to claims 7, 15, 25: Caruk et al teaches multiple base address registers in accordance with the AGP specification. The AGP specification in turn refers to the PCI specification which teaches the base address registers having prefetchable and non-prefetchable and I/O space and non I/O space determinations. PCI specification page 196.

In regards to claims 9, 17: Caruk et al teaches a configuration EEPROM. Which is an electrically erasable programmable ROM.

In regards to claim 27: Caruk et al does not teach the EEPROM being removable. MPEP 2144.04 V C states to make separable is not a patentable distinction.

4. Claims 3, 12, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caruk et al PN 6,662,257 in view of Surugucchi et al PN 6,094,699 and Venkat PN 5,857,083 as applied to claim 1 above, and further in view of Applicants admitted prior art.

In regards to claims 3, 12, 21: Caruk et al in view of Surugucchi et al and Venkat teach the bridge attached to a AGP bus described above. Caruk et al in view of Surugucchi et al and Venkat do not teach a north bridge. Applicants admitted prior art teaches a north bridge attaches an AGP bus. It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the bridge of Caruk et al in view of Surugucchi et al and Venkat in the system of Applicants admitted prior art because this would have separated the graphics from the PCI system thus freeing the PCI system.

Allowable Subject Matter

5. Claims 29-31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In regards to claims 29-31: The examiner was unable to find the exact structure claimed.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul R. Myers whose telephone number is 703 305 9656. The examiner can normally be reached on Mon-Thur 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 703 305 4815. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PRM
January 4, 2005

A handwritten signature in black ink, appearing to read "Paul R. Myers".

PAUL R. MYERS
PRIMARY EXAMINER